

Letter For Electronic Distribution

Original signed letter on file at the following address:

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April 12, 2000

Mr. John Dirickson, P.E.
Environmental Engineer
Naval Air Station, Fallon
Public Works Department
Environmental Division-Code 187JD
4755 Pasture Rd.
Fallon, NV 89496

RE: NDEP Response to Site 23, Shipping and Receiving Disposal Site
Draft Final Decision Document, August 27, 1999, Sites 4, 7, 9, 10, 11, 12, 17, 18, 19, 23, and 24
Remedial Investigation/Feasibility Study
Naval Air Station Fallon

Dear Mr. Dirickson:

Nevada Division of Environmental Protection (NDEP) staff has reviewed NAS Fallon's Report entitled *Decision Document, Sites 4, 7, 9, 10, 11, 12, 17, 18, 19, 23, and 24, Draft Final*, dated August 27, 1999. This report was prepared in response to a series of NDEP letters which commented on NAS Fallon's report entitled *Record of Decision, Sites 4, 5, 7, 8, 9, 10, 11, 15, 17, 18, 19, 23, 24, 25, 26, 27 Naval Air Station Fallon* (ROD), dated June 5, 1998. Due to significant changes between the Draft Final Decision Document and the Record of Decision, the referenced Draft Final Decision Document was reviewed as a draft document instead of a draft final. NDEP's comments on Site 23, Shipping and Receiving Disposal Site, are addressed in this letter.

The level of detail and explanation presented in the Draft Final Decision Document does not appear to adequately explain the nature and extent of soil and groundwater contamination associated with Site 23. Based on NDEP's review of site conditions and supporting documentation to verify information provided in the Draft Final Decision Document, the NDEP remains concerned that significant data gaps remain. In particular, it appears that several potential contaminant sources at Site 23 were not investigated during the Remedial Investigation/Feasibility Study (RI/FS), including: **1)** the disposal trenches; **2)** the former transformer storage area; and **3)** the area where contamination was indicated by data collected from groundwater test holes. Also, no groundwater monitoring wells were installed on the east side of Site 23, downgradient of potential contaminant sources, to assess if contaminants are migrating to the unnamed drainage canal on the east side of Site 23. This drainage canal runs south to the Lower Diagonal Drain which flows into several lakes and wetlands in the area. Due to a lack of data, the nature and extent of contamination at Site 23 and the potential

for contaminants to migrate off-base remain unknown.

This document needs to be available to the public for review, as appropriate, and an accurate record in the Decision Document is required so that an informed decision can be made. The Decision Document needs to include sufficient information regarding the Site 23 investigation so that the reader who is not familiar with the site can understand the extent of investigation activities. Accordingly, the Decision Document needs to include a drawing that clearly shows where soil and groundwater samples were collected in relationship to the contaminant sources. A description of all site characterization work performed after the RI Report was completed (September 1994) also needs to be included. The public needs to understand that the types of debris buried at Site 23 remain unknown, and that the potential for contaminants to migrate off-base has not been fully evaluated. These issues are discussed further in the comments attached to this letter.

Formal approval of a "No Further Action" Decision Document is based on the extent of the investigation and remediation, an understanding of the nature and extent of contamination, documentation in the administrative record, and post closure care which includes institutional controls, land use restrictions, and/or post-closure monitoring. The NDEP is concerned that contamination associated with Site 23 could be more extensive than presented in the Draft Final Decision Document. Of considerable concern to the NDEP is that contaminant sources do not appear to have been investigated, and documentation to support the "No Further Action" recommendation does not appear to be included in the administrative record. In a letter dated February 10, 1999, the NDEP requested that supporting documentation (including field logs for MW74 showing sample depths, excavation logs, boring logs, laboratory analytical reports, and the RI/FS Sampling and Analysis Plan) be provided to the NDEP. However, these documents have not been provided. In consideration of these factors, the NDEP cannot concur with "No Further Action" at this time.

NAS Fallon needs to prepare a proposed plan of action to re-evaluate RI/FS activities at Site 23. The plan of action needs to be submitted to the NDEP for review and concurrence, and needs to address 1) an assessment of all potential sources of contamination at Site 23, and a summary of characterization work performed to date to evaluate each source; 2) how State landfill closure requirements will be achieved, 3) post-closure monitoring that demonstrates a lack of contaminant migration from Site 23, and 4) contingency plans for site remediation in case if significant groundwater contamination is detected during monitoring. The plan of action also needs to address NDEP's comments on the Draft Final Decision Document for Site 23 which are attached to this letter. NAS Fallon has not responded to many of NDEP's comments presented in the letter dated February 10, 1999. Comments in that letter which were not addressed in the Draft Final Decision Document are reiterated in the comments attached to this letter.

Since many of the issues regarding Site 23 have been on-going and unresolved for an extended period of time, please provide a time frame for addressing the comments in this letter within 30 days. If we as project managers cannot agree on a process to resolve these issues, the NDEP will need to initiate the dispute resolution process. If you have any questions, or need further clarification, please do not hesitate to contact me at (775) 687-4670, extension 3053.

Sincerely,

Jeffrey J. Johnson, P.E.
Geological Engineer
Bureau of Federal Facilities

JJ/js

cc:

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**COMMENTS ON THE DRAFT FINAL DECISION DOCUMENT
SITE 23, SHIPPING AND RECEIVING DISPOSAL SITE**

1. Page 1, third paragraph: The Draft Final Decision Document states: “*The decision not to undertake a remedial action for this site is consistent with the factors set forth in the National Contingency Plan (NCP) 40 CFR part 300, and Nevada Administrative Code (NAC) Sections 444.570 through 444.7499 and 445A.226 through 445A.22755. This decision was based on one or more of the following:*” (three bulleted reasons follow).

The NDEP cannot concur with the above statement for the following reasons:

- C Potential soil and groundwater contamination was not investigated in the following areas at Site 23: **1)** in the vicinity of the disposal trenches; **2)** around the former transformer storage area; and **3)** the area where contamination was indicated by data collected from groundwater test holes. Consequently, the nature and extent of soil and groundwater contamination associated with these areas is unknown, and the accuracy of the statement after the second bullet cannot be determined. See comments **7** and **8**.
 - C Site 23, which includes a landfill, has not been closed in accordance with NAC 444.570 through 444.7499. NAS Fallon needs to address how Site 23 can be closed in accordance with the regulations. Due to the age of the landfill, the NDEP may waive some landfill closure requirements. See comments **11** and **12**.
 - C Contaminant sources that may exist at Site 23 were not sampled. Therefore, an adequate risk assessment could not be performed, and the statements after the first and third bullets cannot be verified. See comment **9**.
 - C Supporting documentation appears to be missing from the administrative record. See comments **7** and **14**. Therefore, NAS Fallon does not appear to be in full compliance with 40 CFR Part 300, Subpart I: Administrative Record for Selection of Response Action.
2. Page 1, last paragraph in Section I: The Draft Final Decision Document states: “*The Nevada Division of Environmental Protection (NDEP) has reviewed this document and concurred with this decision. There are not any nationally significant or precedent setting issues for this site.*”

The NDEP concurrence with “No Further Action” for this site in letters dated May 17, 1994 and August 21, 1997 was based on the assumption that reasonably supporting documentation would be formally presented to the NDEP. However, numerous issues which are detailed in the comments in this letter have not been acceptably supported by documentation. Also, a review of the Site 23 files indicates that several potential contaminant sources were not investigated at Site 23, and that the potential for groundwater to be contaminated from waste in the disposal trenches at Site 23 remains high. Due to these factors, the NDEP’s previous concurrence with a “No Further Action” determination is no longer valid. NAS Fallon needs to prepare a proposed plan of action to re-evaluate RI/FS activities at Site 23. See comments **11** and **12**.

3. Page 2, Section A, last paragraph: The Draft Final Decision Document states “*The RI Report recommended 14 of the remaining 21 IR Program sites, including Site 23, The Shipping and Receiving*

Disposal Site for “no further action”. ... Low level of soil contamination detected at Site 23 was below point of concern for both human health and ecological risk. (ASG 1994) Groundwater contamination near the site was related to the up gradient Site 16, Old Fuel Farm. This dissolved phase plume will be addressed as part of the Site 16 remedial action.”

The NDEP cannot concur with the above statement. Soil samples collected at Site 23 were neither located near potential source areas nor downgradient of potential sources areas. The potential sources at Site 23 which were not investigated include: **1)** the disposal trenches; **2)** the former transformer storage area; and **3)** the area where contamination was indicated by data collected from groundwater test holes. Also, only one monitoring well (MW74) was installed at Site 23 in March 1996. This well is not located downgradient of potential contaminant sources areas at Site 23 and appears to be located too far to the west to provide useful data to evaluate conditions at Site 23. The nature and extent of soil and groundwater contamination associated with the potential sources remains unknown. See comments **7** and **8**.

4. Page 2, Section 1.2 Geology: The Draft Final Decision Document does not address site-specific geological conditions for Site 23. The RI Report was reviewed to determine if site-specific geological data are available. Page 10-13 of the RI Report states that lithologic information for Sites 11, 16, 17, 19 and 23 was obtained during the installation of monitoring wells MW25L, MW26, MW27L, MW28, MW29L, MW30, MW63, MW64, MW65, MW66 and MW67. None of these wells were drilled at Site 23. The nearest monitoring wells to Site 23 include MW25, located approximately 250 feet to the west, and MW66, located approximately 100 feet southwest of the southwest corner of Site 23. For all practical purposes, lithologic/geologic information was not collected from Site 23 during the RI/FS.

After the RI Report was completed, monitoring well MW74 was drilled at Site 23. Based on logs presented in the January 1997 Semi-Annual Progress Report, soils from the ground surface to the water table consist of trash and silty sand. The water table was identified at 4.0 feet below ground surface. Fine graded sand extends below the water table to an approximate depth of 10 feet. This information should be included in the Decision Document.

5. Page 5, Section F, last paragraph: The Draft Final Decision Document states “*The Draft Decision Document for 11 sites including Site 23 will be published in the Lahontan Valley News and the Fallon Eagle Standard. These community participation activities fulfill the requirements of the CERCLA: Section 113(k)(2)(B)(I-v) and 117(a)(2). The Administration Record is available for review at the Churchill County Library.*”

Based on Appendix A in the Draft Final Decision Document (Administrative Record), the documents listed below were not included in the administrative record. These documents should be listed because they contain data, factual information, and analyses that form the basis for the selection of the response action.

- C A copy of the field logs for MW74.
- C Progress Reports that included data or interpretations for Site 23.
- C Logs prepared during excavation of the surface depressions.
- C Logs of the four borings drilled in the asbestos disposal area.
- C Laboratory analytical reports.

6. Page 5, Section III, Investigation Summary: The Draft Final Decision Document states “*The Phase II RI for Group IV Sites consisted of conducting 2 geophysical surveys, 29 soil borings, 202 groundwater*

test borings, 25 monitoring wells, and 9 piezometers. Most of these investigations were conducted to evaluate the dissolved and free product plumes on Site 14 and 16.”

Most of these activities cannot be used to evaluate the nature and extent of contamination at Site 23. Those activities pertinent to Site 23 should be pointed out in this section. For Site 23, onsite investigation activities during the RI/FS included drilling four borings to a depth of four feet in the asbestos burial area; drilling 8 groundwater test borings, of which 7 detected contamination (Figure 10.5 in the RI Report, page 10-18); conducting one geophysical survey south of the disposal trenches; and installing monitoring well MW-74 during March 1996.

- 7A. Page 6, Section A, Vadose Zone and Soil, first paragraph: The Draft Final Decision Document states: *“First iteration soil characterization at Site 23 included drilling three soil borings. The borings were drilled to a depth of 4 ft in the former transformer storage area to test for PCBs. No PCBs or asbestos was detected, however, the samples revealed minor amounts of the pesticide DDT and degradation products DDD and DDE. It is significant to note that the pesticides were detected only in the top 2 ft of soil and have apparently not migrated. The level of soil contamination of DDT, DDD and DDE are below the State action levels. (ORNL 94(I))”*

The NDEP does not concur with the statement that asbestos was not detected. Based on information provided to the NDEP, asbestos was neither investigated nor analyzed for in soil samples. In a letter dated February 12, 1997, the NDEP requested NAS Fallon to determine if asbestos was detected in borings S23SB01 through S23SB03 drilled in the asbestos disposal area, and stated that these data are needed before a no-further action decision document can be prepared. NAS Fallon responded in a letter dated May 9, 1997 by stating *“The shallow soil borings at site 23 were not intended to look for asbestos. They were only placed to detect petroleum, PCBs and pesticides. Asbestos was not sampled or tested for.”* In a subsequent letter dated July 18, 1997, the NDEP again requested that NAS Fallon submit data regarding the presence or absence of asbestos prior to the preparation of no further action decision documents. The Navy responded in a letter dated July 30, 1997 which states *“During the Remedial Investigation Feasibility Study (RI/FS) of site 23, three holes were placed in the area where asbestos was allegedly disposed. The core holes (total depth of two to four feet) were installed to obtain soil analyses for organo-chlorine pesticides, not asbestos. Mr. Dennis Green, Oak Ridge National Laboratories, who performed the RI/FS stated that the hole logs did not mention finding any asbestos containing material during sampling.”*

This statement cannot be used as supporting documentation to verify that asbestos was not present in the borings. Based on the letters described above, the Decision Document should not state that asbestos was not detected. The NDEP previously addressed this issue in a letter dated February 10, 1999 and a response has not yet been received. The presence or extent of asbestos in soil remains unknown and the Decision Document needs to state this.

The Draft Final Decision Document states that borings S23SB01, S23SB02, and S23SB03 were drilled in the former transformer storage area and that PCBs were not detected. This statement does not appear to be accurate. Based on Figures 3 and 4 in the Draft Final Decision Document and NAS Fallon’s letter dated July 30, 1997, it appears that the three borings were drilled in the vicinity of the asbestos burial area, south of the former transformer storage area. The most likely area where PCB-contaminated soil would exist would be around the former transformer storage area. Without analytical data from soil samples collected around the former transformer storage area, the nature and extent of PCBs in soil cannot be verified. The NDEP previously addressed this issue in a letter dated February 10, 1999 and a response has not yet been received. This issue needs to be addressed in the Decision Document.

- 7B. Page 6, Section A. Vadose Zone and Soil, second paragraph: The Draft Final Decision Document states *“Second iteration activities proposed another soil boring near one of the previous bore holes to obtain a fresh soil sample near the ground surface. This sample was to be tested for pesticides and subjected to the toxicity characteristic leaching procedure (TCLP) to determine leachable quantities of pesticides. The soil boring, BH04, was drilled in the vicinity of the previously drilled BH02 and BH03. Soil samples were collected from the 0 to 2 ft interval. The results showed that DDT and derivatives were present at concentrations comparable to those measured in samples from the other bore holes (<100 g/kg).”*

In the letter dated February 10, 1999, the NDEP requested clarification on this statement; however, a response has not yet been received. The above statement discusses the TCLP analysis, then states *“The results showed that DDT and derivatives were present at concentrations comparable to those measured in samples from the other bore holes (<100 g/kg).”* Several concerns are noted here. Concentration units for TCLP results should not be reported in g/kg, and TCLP results cannot be compared to results for samples not subjected to the TCLP. Also, a maximum concentration for the TCLP has not been established for DDT, and it is unclear why this analytical method was performed. Contaminant concentrations need to be compared to the PRGs to determine if remediation is warranted. Based on a review of Table 1 in the Draft Final Decision Document, it appears that TCLP results for samples collected from the fourth boring (BH04) were not reported which is inconsistent with the text in the Draft Final Decision Document. The Decision Document needs to be revised to address the concerns discussed above. In the February 10, 1999 letter, the NDEP requested that laboratory reports be submitted to verify analytical results and clarify some of these issues. The NDEP has not yet received a response regarding laboratory reports. Without laboratory reports, analytical results cannot be used to support a decision (see comment 14).

- 7C. Vadose Zone and Soil: Geophysical Survey to locate buried debris (not fully presented in Draft Final Decision Document)

On pages 3-21 and 3-22 of the PA/SI Report, Dames & Moore recommended that a geophysical survey be conducted over the entire area of Site 23 to evaluate the location of the waste burial sites and that two wells be installed within Site 23 (Figure 3-13). The RI Work Plan dated August 1989 (page I-79) states that EM and magnetic geophysical surveys will be conducted over Site 23 to locate buried equipment. The work plan also states *“ Map the site so that applicable land use restrictions can be recommended.”* Based on available supporting documentation, it appears that geophysical surveys were conducted only in the southern portion of Site 23, and that a geophysical survey was not conducted over the northern portion of the site where the disposal trenches are located. Also, the land-use restriction map does not appear to have been provided to the NDEP. It appears that recommendations provided in the PA/SI Report and tasks to be completed under the RI Work Plan were not fully implemented. Unless additional supporting documentation is provided, the NDEP considers the RI/FS for Site 23 to be incomplete. The NDEP previously addressed this issue in the letter dated February 10, 1999. The Decision Document needs to address these issues and provide the basis for not completing RI/FS work at Site 23.

Based on available information, a buried aircraft may still exist at Site 23. The RI Report states on page B-14 *“There does not appear to be a buried aircraft in the surveyed area **unless it is buried underneath one of the surface scrap piles**”*. Based on available information, the scrap piles were not removed until 1996 when additional characterization work for Site 23 was performed to evaluate the extent of contamination associated with surface soil staining. NAS Fallon’s letter dated November 22,

1995 states:

“Oak Ridge National Laboratory conducted a 1000' x 400' geophysical survey for Sites 19 and 23 The survey did not detect any buried materials in this area, but did indicate metallic debris on the surface. This debris is a collection of ordnance-related packaging, target material, and aircraft parts from the ranges. The Defense Reutilization and Management office (DRMO) has awarded a contract for the disposal of this metallic debris. When the DRMO contractor has cleared the area, Station personnel will use a backhoe to dig within the surface depressions identified in your site visit to determine if there are any materials of concern.”

The buried aircraft may not have been located during the geophysical survey conducted in 1989 because it was located under one of the scrap piles which were not removed until 1996. The Decision Document needs to address the potential for a buried aircraft to exist at the site. This issue was previously addressed in NDEP's letter dated February 10, 1999.

7D. Analytical data collected from the vadose zone after the RI Report was completed (not included in Draft Final Decision Document)

Investigation activities performed at Site 23 after the RI Report was completed were not described in the Draft Final Decision Document. This information needs to be included in the Decision Document, and the drawings need to be updated to include the locations of surface soil samples and monitoring wells that were collected/installed after the RI report was completed.

During a site inspection on September 19, 1995, NDEP observed several burn pits with soil staining and requested that the burn pits be sampled to evaluate the extent of contamination. Two soil samples were subsequently collected from the burn pits along with a third background sample. The samples were analyzed for semi-volatile organic compounds (SVOCs) and metals, but not for TPH which may be the most likely contaminant resulting in soil staining. Analytical results indicated that concentrations of chromium and lead in the samples were higher than concentrations in the background sample. Although a sample was subjected to the TCLP to evaluate the leachability of lead, the leachability of chromium was not assessed. In the letter dated February 10, 1999, the NDEP requested the basis for not analyzing the soil samples for TPH or assessing the leachability of chromium. The NDEP also requested that logs prepared during excavation of the surface depressions be submitted. The NDEP has not yet received a response regarding these issues. If results of this investigation are used to support a decision, then the requested supporting documentation, and the basis for the analytical program, need to be made available to the NDEP for review.

Monitoring well MW74 was installed on the west edge of Site 23 during March 1996, but is not shown on the drawings in the Draft Final Decision Document. The well is located on the figure presented in NAS Fallon's letter dated May 9, 1997. Groundwater was identified at 4 feet below ground surface. The May 9, 1997 letter states a soil sample was collected from the vadose zone, but a depth is not provided. The NDEP is requesting a copy of the field logs to verify the depth of the sample.

8A. Page 6, Section B, Groundwater, first paragraph: The Draft Final Decision Document states *“No groundwater investigation was conducted at Site 23 due to the lack of potential contamination source at the site. However, the Group IV Sites investigation drilled 202 groundwater test borings.....Some of these groundwater test borings were drilled in Site 23 and down gradient. The sampling result of these borings indicates no groundwater contamination from disposal activities at Site 23.”*

The NDEP does not concur with the first and last sentences in the above statement. Before the RI/FS was initiated, the four disposal trenches in the northern part of the site were one of the main areas of concern. The PA/SI Report states on page 8-48 *"Depending on the type and quantity of waste liquids buried here, it is likely that soil and ground-water contamination have occurred at this site."* When Site 23 features are combined from figures 3 and 4 in the Draft Final Decision Document, the figure presented in the May 9, 1997 letter, and Figure B.6 in Volume II of the RI Report (page B-12), it appears that no RI/FS activities were performed in this area. However, groundwater test holes were drilled at the south end of the trenches. Test holes 64, 69, and S23GWI on Figure 4 of the Draft Final Decision Document indicate that contamination may be present in the area. However, this possible contaminant source was not evaluated further, and the nature and extent of soil and groundwater contamination that may be associated with the disposal trenches remain unknown. Site 23 is located near a drainage canal which provides a direct route for off-site migration of contaminants. These issues need to be addressed in the Decision Document.

Another potential area of concern at Site 23 is the suspected aircraft burial site. The PA/SI Report states on page 8-48 *"...lube oil and hydraulic fluid may have been in tanks or the engines of the airplane (Table 8-1). Leakage of these fluids may have resulted in soil or ground-water contamination in this area."* A geophysical survey was conducted to locate the suspected buried aircraft. However, as stated in comment 7C above, the geophysical survey was inhibited by metal scrap piles. RI/FS data suggest that contamination may be present in the area as indicated by data collected from groundwater test holes drilled near the suspected area of the buried aircraft. (See holes 60, 59, and 63 on Figure 4 of the Draft Final Decision Document and Figure 3 of the Draft Final Decision Document.) This area could be a contaminant source at Site 23 and needs to be addressed in the Decision Document. In general, the NDEP does not have enough data to determine that a contaminant source is not present at Site 23.

Recommendations provided in the PA/SI Report for Site 23 do not appear to have been considered during the RI/FS. The PA/SI Report recommended that two ground water monitoring wells be installed at Site 23, one at the location of the disposal trenches and one downgradient in the southeast corner of Site 23. However, only one monitoring well (MW74) was installed in March 1996. This well is not located downgradient of potential contaminant sources areas at Site 23 and appears to be located too far to the west to provide useful data to evaluate conditions at Site 23. An area at Site 23 that was not considered an area of concern in the PA/SI Report was the asbestos burial area. The PA/SI Report states on page 8-48 *"Because the materials have apparently been properly disposed of, asbestos contamination of soil is considered unlikely at the burial site"*. However, this is the only area where borings were drilled at Site 23 during the RI/FS. The Decision Document needs to clarify why the RI/FS program for Site 23 was implemented in a manner that was inconsistent with recommendations provided in the PA/SI Report.

In a letter dated October 30, 1995, NAS Fallon stated:

"In your September 13, 1995 letter, NDEP requests that NAS Fallon include Sites 18, 20, 21, and 23 in the groundwater sampling work plan to be submitted in December 1995. However, NDEP and NAS Fallon Environmental Division agreed in the September 6, 1995 meeting to review the draft Decision Documents (to be submitted in the third quarter of CY96) prior to further action at these four sites. Reviewing the site characterization and groundwater velocity data within these documents will enable NDEP and NAS Fallon to present technically sound findings to the other RAB members regarding future groundwater monitoring. If the Decision Documents process finds that additional monitoring is warranted, these sites can be added to the September 1996 round of groundwater sampling. We do know that based on the RI and past rounds of downgradient

monitoring that there are no contaminants of concern presently migrating from these sites, thus there are no human health or ecological risks which require immediate action."

The above statement needs to be considered during closure of Site 23. The current Draft Final Decision Document being reviewed, dated August 27, 1999, is the first comprehensive decision document presented for Site 23. The June 5, 1998 document was brief and did not present data regarding the presence of contaminants, groundwater velocities, monitoring well locations, or a summary of the RI/FS. It should also be noted that no monitoring wells were installed downgradient of Site 23 to detect contaminants which could be migrating to the unnamed drainage canal east of Site 23.

- 8B. Page 6, Section B, Groundwater, second paragraph: The Draft Final Decision Document states "*Bail tests from monitoring wells MW26, MW27, MW28, MW29 and MW30 ranged from 0.2 to 12.0 feet/day. Combining the gradient of 0.002 ft across Site 19 and assuming 33% porosity, the resulting calculated groundwater velocity ranges from 0.4 to 26.5 ft/year. "*

The monitoring wells described above are not located at, or near, Site 23. The heterogeneous nature of lithologic conditions underlying NAS Fallon has previously been demonstrated at numerous sites, and data collected from the above wells may not represent hydrogeologic conditions at Site 23. This information needs be presented in the Decision Document. If the above statement regarding the bail tests at Site 19 remains in the Site 23 Decision Document, then NDEP's comments regarding the bail tests at Site 19 should be incorporated in the Site 23 Decision Document.

9. Page 6, Section C, Risk Assessment Summary: The Draft Final Decision Document states "*The risk assessment for Site 23, The Shipping and Receiving Disposal Site, soils indicates that the human health or ecological risk calculations were below acceptable risk. A quantitative human health or ecological risk for groundwater was not conducted due to the absence of contamination.(ASG 1994)"*

The NDEP cannot concur with results of the risk assessment because sufficient data were not collected for analysis. The RI/FS at Site 23 did not include investigations to evaluate the nature and extent of potential soil and groundwater contamination associated with the disposal trenches, the former transformer storage area, or the area near the groundwater test holes where groundwater contamination was indicated. The only soil samples collected at Site 23 during the RI/FS were located at the west end of the asbestos disposal area, which was not considered an area of concern in the PA/SI Report. No groundwater samples were collected from Site 23 during the RI/FS. This issue needs to be addressed in the Decision Document.

10. Page 7, Section D, Conclusion: The Draft Final Decision Document states "*Soil contamination detected at Site 23, The Shipping and Receiving Disposal Site, was low levels of DDT and it derivatives and was below point of concern for both human health and ecological risk. (ASG 1994) Ground-water contamination near the site is related to the up gradient Site 16, Old Fuel Farm. This dissolved-phase plume will be addressed as part of the Site 16 remedial action. Based on this conclusion, the remedial decision for Site 23, the Shipping and Receiving Disposal Site, is No Further Action. (ORNL 94(I))"*

Data collected during the RI/FS, as presented in the Draft Final Decision Document, do not address the nature and extent of contamination that may be associated with several source areas at Site 23, including the disposal trenches, the former transformer storage area, or the area near the groundwater test holes where groundwater contamination was indicated. Also, supporting documentation (boring logs, analytical reports, a map showing recommended land use restrictions, etc.) do not appear to be included in the administrative record. Therefore, the NDEP cannot concur with the above conclusion.

11. Page 7, Section IV, Proposed Action: The Draft Final Decision Document states “*Soil contaminant detected during the investigation of the Site 23 were below the point of concern for both human health and ecological risk. There is no ground water contamination at the site. Based on this conclusion, the remedial decision for Site 23, The Shipping and Receiving Disposal Site, is No Further Action.*”

See NDEP comments **7, 8, 9** and **10**.

In the same section, the Draft Final Decision Document states “*NDEP letters dated 17 May 1994 and 21 August 1997 recommended a No Further Action document be prepared for Site 23*”. The NDEP concurred with “No Further Action” in these letters. NDEP’s statements from both letters are quoted below.

- C NDEP’s letters dated May 17, 1994 stated “*The Division concurs with the recommendation of no further investigative or remedial actions at Site 23 **at this time**. The contaminated groundwater beneath the site will be addressed during remedial actions at Site 16. Upon compliance with community relations requirements, please prepare a ROD for this site*”
- C NDEP’s August 21, 1997 states “*No further actions required. Groundwater monitoring at site 16 covers this site.*”

A review of the Site 23 files indicates that several potential contaminant sources were not investigated at Site 23. The potential for groundwater to be contaminated from waste in the disposal trenches at Site 23 remains high without sufficient data to indicate otherwise. Also, NAS Fallon’s proposed closure for the disposal trenches at Site 23 did not address State landfill closure requirements. In consideration of these factors, the NDEP’s previous concurrence with “No Further Action” for Site 23 is no longer considered valid at this time. NAS Fallon needs to prepare a proposed plan of action to re-evaluate RI/FS activities at Site 23. The plan of action needs to be submitted to the NDEP for review. See comment **12** below.

12. Page 7, Section V, Future Activity at Site 23: NAS Fallon has asserted that administrative controls will be imposed on Site 23. Please be advised that administrative controls are subject to future audit.

As stated in comment **11** above, NAS Fallon needs to prepare a proposed plan of action to re-evaluate RI/FS activities at Site 23. The plan of action needs to be submitted to the NDEP for review and needs to include the following elements:

- C An assessment of all potential sources of contamination and a summary of characterization work performed to date to evaluate each source (see NDEP’s letter dated September 25, 1995).
- C How State landfill closure requirements will be achieved. (Due to the age of the landfill, some closure requirements may be waived).
- C Post-closure monitoring that demonstrates a lack of contaminant migration from Site 23. Post-closure monitoring must be specific for Site 23 and address the potential contaminants of concern that were identified during the PA/SI (e.g. TPH as gasoline, TPH as diesel, VOCs, SVOCs, and priority pollutant metals).
- C Contingency plans for site remediation in case if significant groundwater contamination is detected during monitoring.

Post-closure monitoring requirements and associated long-term costs can be reduced if additional characterization work is completed to evaluate the nature and extent of soil and groundwater contamination associated with Site 23.

13. Page 8, Section VI, Recommendations: The Draft Final Decision Document states “*This decision document represents the selection of a no action alternative and subsequent closure for Site 23 at NAS Fallon, Fallon, Nevada. The no action alternative was developed in accordance with CERCLA as amended and is consistent with the NCP. This decision is supported by the documents in the administrative record for the site.*”

The NDEP does not concur with the above statement for the reasons discussed in this letter.

14. NAS Fallon needs to address all comments in NDEP’s February 10, 1999 letter for Site 23. Comments which need to be addressed, but have not been completely discussed above include the following:

Item 2 in NDEP’s February 10, 1999 letter

Accurate drawings must be provided. Site features that are described in the Draft Final Decision Document and which are significant for evaluating site conditions need to be shown on the drawings. Drawings in the Decision Document need to show the following features:

- C Soil and groundwater samples that were collected at Site 23 after the RI Report was completed, including the locations of Pit 1, Pit 2, the background sample location, and MW-74 (See NDEP’s letter dated February 12, 1997).
- C Locations of soil staining, paved areas, the area where the geophysical survey was conducted, and former locations of scrap piles which inhibited the geophysical survey during the RI/FS.

Item 3 in NDEP’s February 10, 1999 letter

Information or data that are used to support the “No Further Action” recommendation must be backed up with supporting documentation. Documentation does not need to be provided with the Decision Document, but needs to be present in NDEP’s files. Supporting documentation for Site 23 missing from the NDEP files are listed below.

- C A copy of the field logs for MW74 to verify the depth of soil samples (see comment **7D**).
- C Logs prepared during excavation of surface depressions, and the basis of the analytical program, for the 1996 investigation (see comment **7D**).
- C Logs of the four borings drilled in the asbestos disposal area.
- C Laboratory analytical reports.
- C Sampling and Analysis Plan for the RI/FS (Volume III of the RI/FS Work Plan).

NAS Fallon needs to either provide the supporting documentation, or state the supporting documentation does not exist and is not included in the Administrative Record.

Groundwater analytical results and detection limits need to be summarized in the Decision Document.

NDEP requested that metal concentrations in soil and groundwater at Site 23 be compared with background metal concentrations, and a drawing which shows where the background samples were collected be provided. The Draft Final Decision Document responds by stating on page C-20

“Comparison of metal concentrations to background metal concentrations will not be provided since metals are not the contaminants of concern at the site.” This statement is not considered to be an appropriate response. Metals were determined to be potential contaminants at Site 23. In regards to the disposal trenches in the northern portion of Site 23, the Draft Final Decision Document states *“Wastes was buried in four bulldozed trenches and reportedly included junk, debris, metal, rubble, paints, thinners, petroleum liquids, oils, and lubricants”*. Based on this description, metals are contaminants of concern. The PA/SI Report recommended on page 3-21 that priority pollutant metals be analyzed in samples collected from Site 23. At NDEP’s request, three soil samples were collected in 1996 after the RI Report was completed. These samples were analyzed for metals; however, issues remain unresolved (see comment **7D**). The Decision Document needs to explain why metals are no longer considered contaminants of concern for both soil and groundwater. Tables showing metal concentrations and the ARARs need to be presented.

NDEP’s letter dated September 25, 1995, requested that closure documents for Site 23 include a summary of the Remedial Investigation for the disposal trenches, former transformer storage area, asbestos burial area, the potentially buried aircraft, and the investigation of the backhoe pits. Investigation activities for each of these areas need to be highlighted in the Decision Document.